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THE GENESEE FARMER.

SATURDAY, APRIL 2, 1836.

Drag-log or Roller.

In the February number of the Farmer's Register, the following method of constructing this useful instrument is given by James M. Garnett, Esq, President of the Fredericksburg Agricultural Society:

"Take a straight log, of any kind of wood most convenient, 6 or 7 feet long, and about 18 or 20 inches in diameter, (22 or 24 would probably be still better.) at both ends, then split and hollow out one of the halves, until you get it sufficiently light. After this fix two strong bars across the log, and mortice them into another piece of the same size, parallel to the log, and nearly of the same length, to which the horses, mules, or oxen are attached, as to the cross bar of a roller. The superiority of this very simple and cheap contrivance, (for the merest cobler can make it,) over any implement yet used for pulverizing ploughed land, none can easily conceive who have not seen it tried. It is certainly true that the same team will draw a roller of the same weight with more ease, but the latter does the work so much more effectually, as greatly to overbalance the difference."

The greater the diameter of the log, the more easily it is drawn, provided the weight remains the same; because it will then pass readily over without scraping up the earth before it. We would recommend therefore, that it be made of the lightest wood; that considerable more than one half of the upper part of the log be split off, and that it then be hollowed out in the form of a trough until of sufficient lightness. In this way any desired size may be adopted.

It is to be observed that this is only intended to supply the place of the common roller, when *pulverization* is the object, hence it is peculiarly adapted to reducing cloddy ground. It is an excellent smoother or preparer of ground for grass seed, which is to be put in by a fine and light harrow. It is also of great utility when applied to the top of newly turned green sward, pressing down the sod and grinding the surface of the soil to powder. It is scarcely necessary to say that when used, the soil should never be wet.

This useful implement has been already noticed by one of our correspondents, (vol. 5, p. 92,) but we have considered it of such value to all who cultivate heavy soils, as to deserve again to be recommended to their attention.

Fowl Meadow Grass.

We regret that with all our researches and inquiries, we are unable to furnish our correspondent of Plymouth in Luzerne co. Pa. with the information requested. Some farmers think that Red Top and Fowl Meadow Grass are only different names for the same thing; but others say that the latter is taller and more productive than Red Top.* We have no knowledge that Fowl Meadow Grass is cultivated in this district, nor where the seed could be obtained.

In Drown's Compendium of Agriculture, and in Lathrop's Farmer's Library, Fowl Meadow Grass is given under the scientific name of *Poa aviaria*, but we presume without any proper authority; for we find no such species recognized, not even under a synonym, by those who have described the Grasses of the Middle and Eastern States; and we have consulted the works of *Nuttall*, *Bigelow*, *Eaton*, *Torrey*, *Beck*, and of several other botanical authors. Neither have we found "Fowl Meadow Grass" mentioned, though doubtless they have described it under some other name. All that we can do therefore, is to repeat what *Drown* and *Lathrop* have said: "It was first said to be discovered in a meadow in Dedham, and was supposed to have been brought there by water *fowls*. It is an excellent grass for *wet* meadows, and has been known to yield three tons to an acre in a season. It remains so long green that it may be mowed any time from July till October. It makes very good hay for horses, and neat cattle particularly. Mr. Eliot thinks drained swamps are a very proper soil for the cultivation of this grass."

Sowing Locust Seed.

Considerable difficulty has been experienced in propagating the locust from seed, from the circumstance of their not readily vegetating. This may sometimes be owing to the fact that they do not always come to perfection here, but this is generally in consequence of not taking the necessary care in preparing them. The following method for this purpose may not be generally known, or if known it is not attended to. It will insure success, and cause the seeds to grow as readily as beans or Indian corn.

Place a quantity of the seed in a vessel holding a quart or two, pour on boiling water, and let it stand twenty-four hours. Then decant it, and it will be found that a considerable number are softened and swelled by the operation. These are to be separated from the rest and planted; and to the remaining unswollen ones another portion of hot water is to be added, which also is to remain twenty-four hours, and a second selection made, to be planted as before. In a few days nearly the whole of the seeds will be thus prepared.

* The writer of a note in Dean's New England Farmer, says in commenting on the confused nomenclature in one part of that work, "The Fowl Meadow Grass is *not* the Red Top of New England. The former is a plant which flourishes only in wet soils—the latter, one which will flourish in the driest soils." This distinction is of little value. Red Top (*Agrostis vulgaris*) will grow in dry soils, but it will not yield half a crop.

Evils of Emigration.

We are not disposed to be particularly pleased with the locomotive or emigration mania, which seems to be spreading so rapidly among nearly all classes of our citizens. Steam-boats, canals, and rail-roads, are excellent things in themselves, and when confined to their legitimate uses; but if by affording increased facilities for travel they foster a spirit of restlessness in any situation, and unhinge all our ideas of stability, and make our whole people a wayside and wayfaring population, as they certainly bid fair to do, it requires no great sagacity to foresee they must be productive of irremediable mischiefs. When a man once brings himself to consider the steam-boat or rail-roaid car as his habitation—when he begins to deem it cheaper to take his meals at the tavern than at his own house—then, so far as he is concerned, all the foundations that unite mankind in a civilized society may be said to be broken up, and all the attachments that bind a man to his native soil, and the sweet associations that cluster around the word home, will be scattered to the winds. We do not like to see so many of our farmers becoming migratory; of almost annually shifting their location, like the inhabitants of a city, and frequently without any satisfactory assignable cause, unless the mere pleasure of a removal can be considered such. We think it bodes no good to them as individuals, or to the country. Not to them, if Dr. Franklin was right, when he asserted that three removes was as bad as one fire; nor to the country, for experience in other countries has shown, that nearly all the improvement in the arts and sciences, the advance in agricultural skill and prosperity, the progress of national wealth and influence, and the necessary general diffusion of knowledge, depend almost wholly on the stability and tone of feeling existing among the citizens. As well may we look for the refinements of civilized life among the wandering Nomades of Asiatic Tartary, or the Bedouins of the Sahara, as to expect these desirable things in this or any other country, among men who stay at most but two or three years in a place, and who, ever dissatisfied with their present situation, are constantly on the search for some new discovered Eldorado—a place where wealth will come at the bidding, but which there is reason to believe will ever elude their pursuit. We dislike too the disposition, too frequently manifested among our large and wealthy farmers, of swallowing up all the small farmers in their vicinity, and thus reducing them to the situation of vassals, or compelling them to migrate to the far west. There is clearly too strong a disposition prevalent to possess large farms, since it is evident to all that large farms are rarely if ever cultivated with as much skill and care as smaller ones, and consequently yield less profit on the capital invested. By enlarging farms beyond suitable limits, and thus in effect driving off a considerable part of the population, the scarcity of labor, and its price, is greatly increased, and this is an evil which is already seriously felt in some sections of our wheat country, and is constantly on the

advance. There are few farmers who are able to manage more than one hundred and fifty or two hundred acres with advantage to themselves, and this is a fact which should have its proper influence in all cases where the investing of capital in land is under consideration.

We regret this migratory propensity the more, as it has an inevitable tendency to lower the standard of agricultural taste and pride among us, if it should not prove their total destruction. It is rarely, and indeed we believe never the case, that a man in any section of the country finds a farm that meets his wishes in every respect. In selecting a farm, the purchaser should be attentive to the three grand requisites of a good soil, water, wood, and the materials for fencing; if these things are present, he has a good farm, and on his industry, taste, and farming skill, the increase in the value and beauty of the premises will mainly depend. He can make his farm such as he desires, after once ascertaing with a skilful eye its capabilities; he can arrange his houses and barns and his fields; he can plant his trees where he needs them, for use or ornament, or shades for his cattle, or borders to his avenues. Gradually he sees the creations of his taste and labor springing up around him, and affording in their completion promise of affluence and ease, rest and provision for a rainy day, and comfort for old age. This state of things, and it is this state of honorable independence to which every farmer should aspire, can never exist where the rage for emigration prevails. It is not in the nature of man to bestow labor where he does not expect to reap in some measure the benefit. Will he plant trees on a farm he is expecting to leave to-morrow?—will he keep his buildings neat and in good repair, when in the coming year he neither knows nor cares who will be their occupants?—will he plant the fruit tree, the vine, or the mulberry, on the premises where he but considers himself a passenger, and has no right to expect to find in the enjoyment of their fruit or their beautiful growth, a compensation for his toil? We think the answer is plain; he will not do this; and hence the life of a migratory individual is always spent without the usual comforts of existence, and a community composed of such must always remain in a state of comparative ignorance and barbarism. We do not deny that cases occur in which a removal to a new country may be decidedly advantageous, but we would request the reader, if he should ever be seized with a hankering inclination to domiciliate himself among the forests of Michigan, or the prairies of Illinois, to count the cost well, and carefully weigh the advantages of a smaller farm, the certainty of good prices and ready market, tolerable roads and excellent schools, against a greater number of acres, attended with the inseparable hardships, toils and privations that belong to a new country. G.

Rats and Mice.

An observant farmer says in a private letter to us, "I have just finished threshing my crops of grain, and am still more confirmed in believing that we lose more than *a tythe* from the depredations of Rats and Mice, in consequence of not threshing out our grain in the fall. The yield constantly decreases in proportion to the time that elapses between the different threshings, provided the grain is of like quality."

Threshing machines have done much to relieve our farmers from such losses. Another great advantage which has been derived from their introduction, is, that the crop can be threshed out in the fall and sent to market before the navigation of the canal closes,—a labor which could not be completed without such assistance. Some judicious farmers however, believe that it costs as much to thresh wheat in this way, as by the flail; and this may be true; but to take a fair view of the whole subject we should consider the quantity that is left in the straw by the flail, and the quantity that is devoured by these vermin.

We are not acquainted with any fact in the history of Quadrupeds that is more curious than the migration of the the common brown Rat (*Mus decumanus.*) Baron Cuvier says, "it appears to be a native of Persia, where it lives in burrows; and that it was not till the year 1727, after an earthquake, that it arrived at Astracan by swimming across the Volga." The earthquake seems to have imparted a new instinct to these restless marauders, for in little more than one century they have over-run most of the world.

We have heard old people speak of the Black Rat as the only kind that was known some years before the Revolutionary War; but these, the Brown or Norway Rat, has entirely superseded, driven out, or eaten; and from all that we have learned of the characters of the two, we might be puzzled to make a choice between them. In the year 1800, we were told that the Brown Rat was not an inhabitant of this district. On unloading a boat which had arrived in our waters from Schenectada, about that period, two rats jumped out and were killed; but the increase of commerce, soon furnished others with an opportunity to make a lodgment among us; and well did they improve them, for in no country we presume, are these pests more thoroughly naturalized.

The following sprightly account of this species is taken from "American Natural History" by the late John D. Godman, M. D. &c.

"It must be confessed that this rat is one of the veriest scoundrels in the brute creation, though it is misfortune in him rather than a fault, since he acts solely in obedience to the impulses of nature—is guided by no other law than his own will, and submits to no restraints except such as are imposed by force. He is therefore, by no means so bad as the scoundrels of a higher order of being, who endowed with superior powers of intelligence, and enjoying the advantages of education, do still act as if they possessed all the villainous qualities of the rat, without being able to offer a similar apology for their conduct.

"Among quadrupeds this rat may be considered as occupying the same rank as the crow does among birds. He is one of the most impudent, troublesome, mischievous, wicked wretches that ever infested the habitation of man. To the most wily cunning he adds a fierceness and malignancy of disposition that frequently renders him a dangerous enemy, and a destroyer of every living creature he can master. He is a pure thief, stealing not merely articles of food, for which his hunger would be a sufficient justification, but substances which can be of no possible utility to him. When he gains access to the library, he does not hesitate to *translate* and appropriate to his own use the works of the most learned authors, and is not so readily detected as some of his brother pirates of the human kind, since he does not carry off his prize entire, but cuts it to pieces before he conveys it to his den. He is, in short, possessed of no one quality to save him from being universally despised, and his character inspires no stronger feeling than contempt, even in those who are under the necessity of putting him to death.

"Prior to the year [1750] this rat, now so notorious for its ravages, was almost, if not wholly, unknown in Europe. It was conveyed to England about that period, in the timber-ships from *Norway*, and hence it has received one of its common names. Many years subsequently it was brought to this country in European ships, and has been gradually propagated from the sea-ports over the greater part of the continent.

"The cunning of these rats is not less than their impudence; it is almost impossible to take them in traps after one or two have been thus caught, as the rest appear perfectly to understand the object of the machine, and afterwards to avoid it with scrupulous care, however tempting may be the bait it contains. The surest way to remove them is by poison, which however they frequently detect and avoid. The power of nux vomica, mixed with some Indian corn or oat meal, and scented with oil of rhodium, is found very effectual in destroying them. Arsenic is very commonly used in the same way for this purpose, but the fatal accidents which frequently occur when this poison is kept about the house, in consequence of the label being removed or changed, and the arsenic administered to members of a family instead of some other medicine, renders it a very objectionable resource."

We conclude our article with the following extract from the Vermont Watchman; and hope that if any of our readers should try the experiment, they will communicate to us the result.

"The house of an innkeeper of my acquaintence was very much infested with vermin; he resorted to many different methods but he could not destroy them; at length he thought of the effect ardent spirits had upon his two legged customers, and he resolved to make an experiment. Accordingly he prepared a pan of black strap,* set it in the cellar and waited the event. The next morning he found *fourteen large* Rats lying helpless around the pan. It is needless to add, he pursued this device until his house was cleared of rats and mice."

Scarcity of Fodder.

The unprecedented duration, and great severity of the present winter, has, as a natural consequence, added greatly to the usual difficulties which in this latitude attend the wintering with ease and without loss the flocks and herds of the farmer. From almost every quarter we hear complaints of the scarcity of fodder; that the coarse grains are almost exhausted; and the high

* We have heard the folllowing composition called *Black Strap: Water* sweetened with *melasses* and primed with *rum* or *whiskey.*

prices which hay and grain of all kinds is commanding, goes far to prove that the supply is not equal to the demand. The truth is, our farmers do not in all cases seem to have adopted proper means to secure a sufficient supply of fodder for the winter consumption of their stocks. They have been anxious to raise the greatest possible quantity of grain; and while they have been constantly adding to the number of their ploughed fields, and diminishing their meadows and pasture lands, they have not made a corresponding reduction in the number of animals these meadows and fields are required to feed. Another reason of the present scarcity may be found in the fact, that farmers do not use the most economical means of feeding their cattle and sheep; and are slow to adopt systems which experience has proved most useful in all cases, and indispensible where the raising of both wheat and stock is an object.

Feeding hay in racks is a great advance on the old method of throwing it on the ground or over the yard to be blown away by the winds or trodden into the manure. Still better is the method of stabling cattle where it is possible, as it is evident to all, that comfort and warmth will cause an animal to do well with a much less quantity of food than would be required if exposed to the cold and storms of the season. But neither of these methods, though improvements, and the means of saving much fodder, can be compared with the beneficial results derived from cutting straw or hay for feeding horses or cattle. Cutting straw or hay can no longer be regarded in the light of a mere farming theory; it has been reduced to the test of rigid experiment, and adopted by many of the most successful agriculturists, both of the old world and the new. The results which first drew public attention to this subject were published in the Quar. Jour. of Agriculture, and may be found in the first volume of the Farmer, page 258. In two of the most extensive stables in London, no hay is ever put into the rack. In these stables, one containing 82 and the other 300 horses, they are fed with hay and straw, the latter in the smallest proportion, cut fine, or into lengths of not less than ¼ of an inch. A horse receives of this in 24 hours 18 lbs. mixed with 14 lbs. ground oats and 1 lb. bruised beans—making 33 lbs. of food in the 24 hours. Sometimes barley and sometimes bran is substituted for oats, according to circumstances, and while they are kept doing daily the severest labor, "the excellent health, condition, and general appearance of the horses, evince the goodness of the treatment adopted." Dr. Sully of Somersetshire has also detailed in the pages of the Sporting Magazine, the system which for more than 20 years he has pursued in feeding his horses, and with the greatest success. Dr. S. is of the opinion, that a horse, with a well filled rack, will consume and spoil upwards of 30 lbs. in 24 hours; but when cut down and mixed with a due proportion of straw, and bruised or coarsely ground oats, or other grain, 10 lbs. are sufficient. His horses receive 30 lbs. of this mixture daily, and thrive under the greatest labor his extensive professional business compels them to undergo. The mixture Dr. S. recommends most highly is as follows; Bruise or ground barley or oats, 5 lbs.—boiled or steamed potatoes and mashed, 5 lbs.—hay cut down into chaff, or quite fine, 8 lbs.—straw cut down fine, 10 lbs.—oil cake or malt dust, 2 lbs.—making 30 in the whole, a quantity sufficient for a day. In all these cases salt is added as required. The experiment of feeding horses in this manner with cut hay or straw and ground grain, has been tried in some extensive stables in New England with decided success; and a late communication from L. F. Allen, Esq. Grand Island, near Buffalo, shows, what indeed could not have been reasonably doubted, that the plan is as applicable to cattle as to horses. It is the opinion of Mr. Allen, that one-third is saved by this process of feeding; and others who have fully tested it, maintain that the expense of an extra hand to take charge of a large stable of horses, or stock of cattle, will be amply repaid in the superior condition of the animals, and the immense saving of fodder. Years ago we satisfied ourselves by repeated experiments, that the cheapest as well as the best food we could give our horses was cut straw and hay, or cut straw alone, sprinkled with corn meal, the whole wet with water, and thus fed to them in a manger. Thus nothing was wasted; their flesh was hard and firm, and their health excellent; and though the trouble of feeding was rather greater than when crude hay and grain was given, the saving in the materials, and the better condition of our teams, was an ample compenation.

We say then to our farmers who are suffering from a scarcity of fodder, make the most of what you have by cutting and mixing with *ground grain*—we say ground grain, as those who feed grain in any other state, act as unwisely as the man who relies on straw without cutting—and do not suffer another winter to come upon you without the most satisfactory evidence that you have a six months' supply of food for your cattle, sheep and horses. G.

The Season.

(In a letter from Cayuga county of the 28th u't.)

The early part of the year 1836 will be long remembered for the deepest snow that has been seen in the land by any of its present inhabitants. The depth in this neighborhood, was about three feet; and perhaps four or five feet in the eastern parts of the county. The roofs of many buildings were crushed, though some were saved by raking off the snow. To render the roads passable, it became necessary to turn out the force of the district, not leaving this duty as in other years to be performed by the first traveler that happened on his way. Yet notwithstanding these exertions, the United States Mail was stopped for two or three days together, at three different times, in consequence of snow-drifts.

It is remarkable that this snow, so unexampled in its depth, did not reach the western limits of this State. I have been informed that twenty miles east of Buffalo, there was no sleighing at the time: and in the neighborhood of Batavia scarcely more than eight inches. In Farmington about one third of what we had here. It is not less worthy of notice that in the middle region of Virginia, the weather cleared up on the commencement of our storm, and continued clear while the vapors here were condensing and pouring over us; and it appears by the Meteorological Table at page 85 of the current volume that a clear sky also prevailed all the time at Lewistown in Illinois.

The smashing of young trees and shrubs is without a parallel. In most cases where the limbs became entangled in the snow, its great weight has stripped them off as it settled. One of my trees which was trained rather low, has split down and separated in four different direction. My gooseberry and currant bushes stood on single stems, and I presume the most of them are ruined, for the snow is still deep over them, though it is now melting very fast. The stalks of the Raspberry can be in no better condition.

Many farmers have been fearful that the wheat would be smothered; and under the snow-drifts there is just cause for apprehension; but with this exception I think the damage will be trifling. The result of my inquiries among farmers on this subject is favorable. I have examined two fields myself; and though the wheat was sowed early, and became well matted over the ground, yet only a very small proportion is damaged. Some small spots of a few inches in diameter, appear to have been more pressed down than the other parts, and *there* the matted leaves are decayed. Late sowed wheat will doubtless escape better.

The Song Sparrow has been singing for some days. The first that I saw this season, came on the 22d of last month; but the cold blasts of winter soon returned, and I expected the little fellow would perish. He took shelter in the wood-house however, for a part of the time; and the thick branches of the White Spruce and of the Trumpet Honeysuckle, also became favorite places of resort. During all this time, his notes were limited to a cheerful twitter; but since the thaw commenced in good earnest, he has poured forth his melody without stint. The Snow Bunting however, still continues along the roads. It is doubtful if these birds have met before in many years, the latter generally departing for the north, before the arrival of the former from the south.

The Chinese Primrose.

(Primula sinensis or *P. prænitens.)*

This lovely novelty presents us with a *white* as well as a *pink* variety. It succeeds well in pure sandy loam, or loam and fine sand in equal parts; it is rather impatient of water in damp weather. Sometimes the seeds ripen well; they should then be *sown as soon as the capsule changes color*, and *that* ought to be taken *while greenish*, otherwise the seeds may be lost. Sow the seeds in shallow pans, and *scarcely cover them* with fine soil; when up, thin out the plants to an inch apart, and when three or four leaves are well developed, raise the plants with earth adhering to the roots, and plant them into the smaller pots, singly; change the pots once or twice, till at length the full grown plants occupy a pot four or five inches in diameter. The green house ought to have six or a dozen of these beauties, which on account of their well defined shining corollas, and elegantly cut and lobed downy leaves, are one of the greatest ornaments of the declining year. It flowers from November to March, and again in the summer.—*Edin. Quar. Jour. Agri.*

A spirited meeting was held at Mount Morris on the 12th instant, of those friendly to the immediate construction of the Genesee Valley Canal. The views of the meeting were set forth in several spirited and appropriate resolutions.

COMMUNICATIONS.

LETTERS FROM A FATHER,

Living in the State of New York.

To his Son in Western Pennsylvania.

NO. XIV.

On the Culture of the Ruta Baga and other ROOTS.

To my Son—After the potatoe, which was the subject of my last letter, the ruta baga, the mangel wurtzel, the carrot, and the beet, follow next in order. I do not name the common turnep, for where that will grow, the ruta baga will grow also, and is no doubt the more valuable root, and will better reward the culturist for his labor and expense of cultivation. It is but right to inform you, that I am now invading a province of husbandry to which I am almost a stranger. I did indeed, many years since, make feeble efforts, two years successively, to cultivate the ruta baga, but as I found it difficult to preserve the young plants from destruction by insects, (the cut worm, as I then supposed,) and as the culture was not seconded at all by my domestics,and was unpopular among my neighbors, I relinquished the pursuit. Yet my crops were respectable, and for one of them I obtained a premium of the Agricultural Society then existing.

I have scarcely a doubt that the soil which you and your neighbors cultivate, is well adapted to the culture of roots, especially those of the turnep family, the ruta baga in particular. I saw, last fall, in your garden and others in the neighborhood, some fine specimens of the ruta baga, at least they were fine, considering the manner in which they grew, which was altogether too thick, ten plants probably having been allowed to grow where there should have been but one. That the soil, however, was perfectly congenial to their growth, there appeared to be no reason to doubt. If I am not much mistaken, the root culture, especially that of the ruta baga, presents to you, and your fellow citizens, claims that ought not to be resisted. While I single out the ruta baga as a plant which I consider as almost certain to thrive in your soil, I ought to say that I know of no reason to doubt that the other roots which have been named will thrive in it equally well. They are all worthy of your experiment.

In making known to you the manner of cultivating roots, their value, and the uses to which they are applicable, I shall be obliged to rely chiefly, not on what I have learned from my own experience, but on information which I have been able to collect from numerous publications on the subject. My principal object then in this letter will be, to present to you a just and true compilation of the opinions and practices of practical men, as I have learned them from the writings on the subject which they have published. I shall speak chiefly of the ruta baga, and it may be well to remark here, that in its culture and uses, it differs very little from the others, especially the mangel wurtzel and the beet.

June is the month in which the seed of the ruta baga should be planted. About the middle of that month is probably the best time. Some think it is better to defer planting till July, but this is doubtful. The seeds may be sown in beds, and the plants cultivated as cabbage plants are, and afterwards transplanted in the field. This method affords some advantages, for as the transplanting will be several weeks later than the sowing of the seed, the seed, the crop may be cultivated on ground from which other crops were taken the same season, as on barley, wheat, or rye stubble, or on ground upon which flax grew, or on a tender clover lay after the crop is taken off. But this method of culture will require a considerable increase of labor, and if no special purposes are to be answered, it will be better to sow where it is intended the crop shall grow.

The ground on which the ruta baga, or any of the root crops, is to be cultivated, should be well manured and well tilled. It is the practice of many, after having got the ground in good order, to plough it into ridges, letting the plough run deep. Some have the ridges 2½ feet apart, and others 3 feet. The ground being thus ridged,and having of course deep furrows between the ridges, the next process is to carry on dung, and deposit it plentifully, not on the ridges, but in the deep furrows between them. This being done, the plough goes again, and reverses the furrows of which these ridges are composed, turning them into the dung, so that the ridges ultimately formed are directly over the dung. This no doubt is a good way of preparing ground for the root culture, but the culturist need not be restricted to this or any other particular method. It is essential only that the ground be well manured and well cultivated.

The ridges, as before remarked, are usually about 2½ or 3 feet apart. Some have them 4 feet apart, others only 20 inches, but the prevailing practice I believe is, to have the rows of ruta baga 2½ or 3 feet asunder. If they were nearer together, neither a plough nor a cultivator could well pass between them, and of course the tillage would be more laborious and expensive. Before the seed is applied, the ridges that have been spoken of may require a little flattening on the top. It may be useful too to make scratches on them, perhaps an inch deep, into which the seeds are to be dropped. The seeding process is best performed by a drill barrow, which is constructed designedly for this, and other similar uses; but it can, with more labor and less expedition, be performed by hand. A very simple and expeditious method of distributing the seeds of ruta baga, and others of a similar size and form, has recently been invented, and published, as I verily believe, in the Genesee Farmer. Yet I have not been able to find the article describing it in either of the volumes of that work, although I have sought after it with great diligence and perseverance. I hope the article will be republished in the Farmer. The most that I can say of this new invention is, that the seeds were shaken out of a tin canister prepared for that use, and that the work was said to be well and expeditiously performed.

After the plants are come up, they will require tillage, and for this purpose a cultivator or light plough may pass between the rows, as for corn and other drilled crops. Weeds must not be allowed to grow among the plants, and the plants themselves must be thinned out at the first hoing, so as to stand on the rows not closer than seven or eight inches from each other. Let it then be remembered, that the rows for ruta buga should be 2½ or 3 feet apart, and the plants should stand seven or eight inches asunder on the rows. One pound of seed is the quantity spoken of as sufficient for an acre, but it is generally admitted that half, or less than half that quantity, will be sufficient, if the seed be good and properly distributed.

The produce of this crop is oftentimes very great, amounting not unfrequently to a thousand bushels an acre, and sometimes nearly doubling that amount. Yet the average produce is, so far as I learn, rated only at about five hundred bushels per acre. Judge Buel speaks of the produce of a well cultivated acre of ruta baga, as seldom being less than six hundred bushels. It is said that all sorts of live stock, from the horse to the hog, after they have become accustomed to the ruta baga, devour it with a good relish, and thrive well upon it. To sheep, especially ewes that have lambs in the spring, it supplies an article of food peculiarly adapted to their wants.

The ruta baga crop is usually harvested in November. It is not in danger, as some other crops are, of being injured by autumnal frosts. It is the better for remaining out, so long as it can so remain without danger of being shut in by the winter. The method of securing the crop, recommended by Judge Buel, and I believe generally practiced, is, to dig pits on dry ground two feet deep, three or four feet wide, and any length that may be desired. The roots are gathered to these pits, and piled in them considerably higher than the natural surface of the ground. The tops of the piles are formed like the roof of a building, descending in two opposite directions. Straw is then applied, as in the very common case of securing potatoes. Last of all the pile is to be covered with earth, to the depth of, as Judge Buel says, of two feet; but surely one third of that covering would be sufficient where I live, and probably it will be sufficient for you. The best way no doubt of wintering ruta baga and other roots is, to keep them in cellars, when cellar room can be spared for that purpose. When roots are to be cultivated on a large scale, it will pay cost to provide cellars under barns, or out-houses, exclusively for that use.

It would be pleasing to me to make known to you the comparative value for stock feeding of any given quantity of the ruta baga, and the like quantities of the other crops usually cultivated for that purpose—for instance, to make known the difference between the worth of an acre of ruta baga, producing an average crop, and the hay which it will require an acre of good meadow to produce—or the difference between the worth for feeding to animals of a bushel of ruta baga, and the like measure of corn. The gentlemen who have cultivated the ruta baga, and written upon the subject, have not published, as they should have done, these important details. Some of them have, indeed, expressed vague opinions, that the roots of ruta baga might, in value for feeding to animals, be equivalent to oats, bushel for bushel. This is probably overrating their value; but if they are worth half as much as oats, which cannot I think be doubted, it would seem their culture may be rendered far more profitable than that of oats. The average produce of oats per acre does not, I believe, exceed thirty-five or forty bushels, whereas it is said, that a well cultivated acre of ruta baga seldom yields less than

six hundred bushels. I leave you and others to follow out this train of reasoning.

On the whole, I have scarcely a doubt that the root husbandry can be rendered highly beneficial to the general interests of the country. To individual farmers who cultivate only small farms, it offers peculiar advantages. Not unlikely the produce of half an acre of roots will winter as many animals as the hay which it would require two or three acres of good meadow to produce. In favor of the root husbandry, especially that of the ruta baga, it is furthermore said to be almost the least of all crops exhausting to the soil.

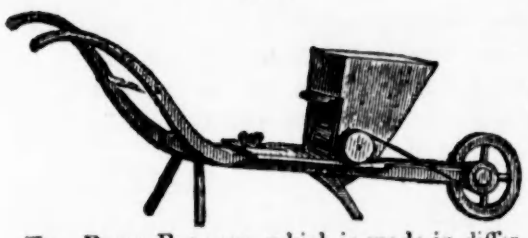
A Father.

New York State, February, 1836.

☞ We republish from our 5th volume, page 193, the following remarks on the improved implements now used in the culture of Ruta Baga. The Drill Barrow invented in Lewis county, for a particular description of which see Gen. Far. vol. 4, p. 290, may be had at Reynolds & Bateham's Seed Store in this city.

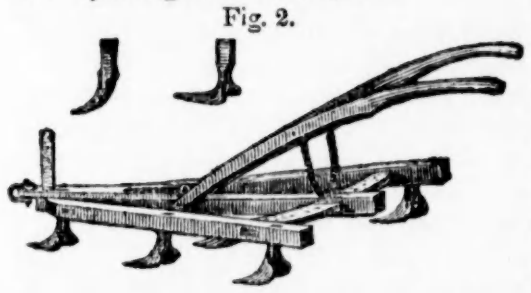
The Implements used in the Turnep culture, which are figured below, are useful for various other purposes on the farm or in the garden. They are, (*fig.* 1,)

Fig. 1.



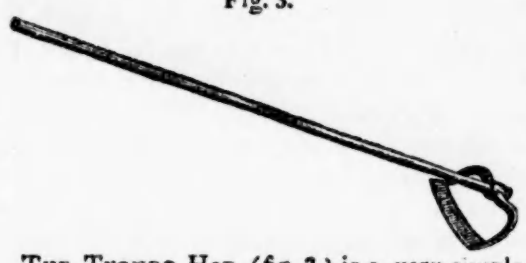
The Drill-Barrow, which is made in different forms, and is used in sowing various small seeds, as onions, radishes, lucern, beans, peas, &c. The machine is propelled like a wheel-barrow, and sows and covers the seed at the same operation. The cut represents the one we have in use. They are manufactured by Mr. Craig, of Galway, and sold at $8. A barrow somewhat differently modeled, has been invented in Lewis county, which has been highly commended for its value in planting corn. Price $15.

Fig. 2.



The Cultivator, (*fig.* 2.) is the most useful implement we know of for dressing Indian corn, as well as ruta baga. By being passed frequently between the rows, the ground is kept free from weeds, and in a fine state of pulverization, while the manure and vegetable matter is left under cover, where it is most beneficial, and the roots of the plants preserved from injury. It should be passed twice at a dressing, and if the soil is stiff or grassy, it may be passed oftener, or repeated at short intervals. The teeth are of various forms, according to the purposes for which they are used. Some of these are figured in the cut. It is most convenient to have sets of different kinds, and the cost is trifling, that they may be shifted at pleasure. Our late excellent neighbor, Joseph Bullock, used effectually to extricate the quack grass in his corn ground, by the frequent use of the cultivator, the teeth of which he had modeled for this purpose. They are manufactured by Mr. Craig, and, together with the drill-barrows spoken of, kept for sale by our enterprising friend, C. N. Bemet, who is making some improvements on both these implements. The cultivator is often denominated horse-hoe, scuffler, scarrifier, &c. It has sometimes a wheel attached forward to regulate the depth.

Fig. 3.



The Turnep Hoe, (*fig.* 3.) is a very simple, but useful implement, particularly in the garden, where it greatly facilitates the weeding process. We have them of various lengths, from four to ten inches. They should be of cast-steel, and may be made of an old file or rasp; the blade should be thin, and not more than one and a half or two inches broad. They may be drawn the arm's length without being raised, and there is little danger of cutting the plants among which they are used.

Watering Cattle in Winter.

BY C.

Mr. Tucker—Viewing as I do the Genesee Farmer, a literary fund from which we its subscribers are drawing weekly from its stock of information, why should we not consider it a duty, as you have so kindly made it a privilege, to contribute our mite to its general stock of usefulness, and deposit in your bank the little sums of knowledge we have acquired in our experience and observation.

I am the more readily induced to offer you this communication, as I perceive you do not view small matters, however humble the theme, as unworthy of notice, provided they may be made to subserve the cause of usefulness; nor will you view, (as you assure us,) with a critical eye the style of language in which our communications may be clothed, while communicating facts that may be of value to others.

My father was a strict economist, and this principle, among many other excellent ones, he frequently attempted to instil into the minds of his children. Never waste or destroy any thing, said he to me one day, as worthless, that can be converted to any useful purpose, and always remember that a pin is easier picked up from the ground than it was ever made. With my father's maxim upon my mind, I have occasionally realized the truth of this sentiment, by converting objects almost useless in themselves, into things of real advantage.

Watering cattle in the winter is often attended with a good deal of trouble and inconvenience to the owner, and sometimes with considerable difficulty to the animals. Some thirty rods from my barn runs a small stream, where I have long been in the habit of watering my horses, cows, &c. At times, in the most severe and stormy weather, I have been obliged to wade through the snow morning and evening, and to cut through the ice, 8, 10 or 12 inches, to find water for them to drink. Have you ever, Mr. Editor, stood near one of these uncouth, awkward watering places, with its deep narrow channel, its almost perpendicular banks, and its surface frozen over to nearly or quite a foot in thickness? Have you, I say, ever stood near, as the poor creatures come up to drink, and observed the caution and timidity with which they drew near, and after anxiously viewing the approach from every accessible point with eager look and longing eyes, pass reluctantly on to the other side, and finally, when compelled by urgent necessity, have you wondered at the dread and reluctance with which they made the attempt, when with bended knees and down stretched neck and trembling limbs, they strain every nerve to reach a drop of the liquid element. In my way to this watering place, in one corner of my barn-yard, is a small marshy spot of ground, through which it was necessary to pass, or to take a circuitous course round to avoid. Year after year have I been viewing this spot, and wished it were out away, but some time last fall, having had some ditching done on my meadow through similar looking ground, I found I had collected quite a permanent stream of running water; and this suggested to me the idea of experimenting on the little marsh in the barn-yard. Beginning therefore at the upper side of it, I dug out a hole, or kind of basin, holding a barrel or more, which I had the pleasure to observe very soon filled with pure water. As there was a little descent in the ground, I was enabled to conduct off the water by a spout into a trough. The descent being but little, the spout lay on the ground—it was of course necessary to dig a place in the ground to receive the trough so as to bring the top about even with the ground. To guard this from freezing, I covered the spout and basin with boards, then put on a little straw, and covered the whole with a few inches of earth. The water is conducted in at one end of the trough and out at the other, and thus by the warmth of the stream continually passing through it, it is kept from freezing, and through the whole winter, even when the thermometer has been 14° below zero, there has been no occasion to cut ice, but a constant stream of pure water always running; and I have now constantly the pleasure of observing what I have heretofore considered a useless object, and even I may say a nuisance, converted into a valuable watering place in my barn-yard, and a useful and pleasant appendage to my farm. Very respectfully yours, C.

Euclid, Ohio, March 4, 1836.

On Raising Cream.

BY DAVID HEICOX.

Mr. Tucker—I have long been of the opinion that the vessels commonly used for raising cream were not the most economical. My attention has been lately drawn to the subject, and my theory strengthened, by the remarks of Ephraim Perkins, in the 4th vol. No. 33, of the Genesee Farmer. Speaking of setting milk for cheese, he says: "Large tin vats, adapted to the size of the dairy, are coming into use; by this," &c. "we had anticipated an absolute certainty of having sweet milk in extreme hot weather; but after a severe thunder storm our milk was lobbered worse than ever." And then adds—"Do large metallic reservoirs attract the electricity with which the atmosphere is charged at this season?" For myself I have not been in the habit of keeping much of a dairy, and therefore can say little from experiment, but it is obvious to any one that metal is a great conductor of heat, and also of cold, or as philosophers say, the "escape of heat," and as it is desirable to keep milk when set for butter in cold weather, with a certain degree of warmth, and in hot weather the opposite, it seems evident to me that heat conductors should be

avoided, and non-conductors used in their stead. I was once told by an earthern ware maker that he had a customer, I think in Oneida county, who kept a considerable dairy, and who bought a new set of pans every year, because, he said, they would raise more cream than old ones. Now if this be the fact, the reason must be because they are when new more porous and lighter, and of course less conductors of heat, than when the pores become filled up by use.

From the above considerations, I would humbly suggest through your agency, to those who keep dairies, an improvement on vessels for raising cream. And for this purpose I should recommend wooden keelers, of convenient size, and well painted with a hard finish. The only objection to them that I know of, must be the first cost, which would be more than the others, but those who are forehanded will, I think, find them the cheapest in the long run, for they will not only be very durable, but will be as easily kept clean as any others, if well varnished. They should be made light and hooped with iron, and I should suppose might be afforded at fifty cents single.

If you should think the above hints would be likely to lead others more capable than myself to an examination of the subject, you are at liberty to insert them. DAVID HEICOX.

Rutland, February 27, 1836.

The Turnep Fly, &c.

MR. TUCKER—I send a few extracts from the Encyclopedia Britannica, which may possibly be of service to you.

In speaking of the culture of turneps, (or more properly the enemy of turneps,) the author remarks: Turneps when young, are apt to be totally destroyed by a multitude of little black flies, from thence called the turnep fly. As a preventive of these, some advise the seed to be mixed with brimstone; but this is improper, as brimstone is found to be poisonous to vegetables. The best method seems to be the fumigation of the fields with smoke of half dried vegetables. For this purpose weeds will answer as well as any. This fumigation must no doubt be often repeated, in order to drive away the innumerable multitudes of these insects, which are capable of destroying a large field of turneps.

Some have supposed that the fly is either engendered in new dung, or enticed by it, and have therefore advised the manure to be laid on in autumn preceding, by which it loses all its noxious qualities, while its nutritive ones are retained, notwithstanding these might be supposed liable in some degree to be exhaled by the sun. This method is said to have been ascertained by experiments; and it is added, that another material advantage accruing from autumn manuring for turneps is, that all the seeds contained in the dung, and which of course are carried on the land with it, vegetate almost immediately, are mostly killed by the severity of the winter, and the few that remain seldom avoid destruction from the plough share.

The following method of sowing has also been recommended as a preventive of the fly: "About midsummer, take the first opportunity when it rains, or there is an apparent certainty of rain approaching, to sow your seed; in this case neither harrow, brush nor roll, after sowing. The natural heat of the ground at that season, and the consequent fermentation occasioned by copious rain, will give an astonishingly quick vegetation to the seed, which in a few days will be up and out of all danger from the fly. At all events, sow not till it rains; it is better to wait a month, or even longer for rain, than to sow (merely for the sake of sowing about the usual time) when the ground is parched with heat. By the scorching of the sun, the oil and vegetative quality of the seed are exhausted; and the few weak plants that come up will be destroyed by the fly before they can attain strength to put forth their rough leaves. The fly infests the ground abundantly in dry hot weather, but does no injury in rain. The falling rain will sufficiently wash the turnep seed into the ground without harrowing it in; which, instead of merely covering, too often buries this small seed at so great a depth, as never afterwards to get above ground."

The Potatoe.

A short extract from the article Potatoe may also be deserving of attention. I have a long time been convinced in my own mind of the propriety of farmers taking some pains to ascertain what particular kind of potatoes were best adapted to their particular location, and as there is no way to come more directly at it than by raising potatoes from the seed, by which we shall be able to select such varieties as best suits us, either for the table or for their large yield. With this view I deem it expedient to add the following extract, touching the method of cultivation.

"Take a bunch of the apples of any sort of potatoes—hang it up in a warm room during the winter, and in February separate the seeds from the pulp, by washing the apples in water, and pressing them with the fingers. Then dry the seeds upon paper. In the month of April, sow these seeds in drills, in a bed of earth well dug and manured with rotten dung. When the plants are about an inch high, draw a little earth up to them with a hoe, in order to lengthen their main roots. When they are about three inches high, dig them up with a spade, and separate them carefully from each other, in order for planting out in the following manner: Prepare a piece of fresh ground by trenching it well—dig up the seedling plants as before directed, and plant them out in the ground, thus prepared, in such a manner that there shall be 16 inches between each plant. As they advance in growth, let them receive one or two earthings up, in order to lengthen the main root, and encourage the shoots under ground. By this management the potatoes will, in the course of one season, arrive at the size of hen's eggs, and the haulm will be as vigorous as if sets had been planted. But what proves their luxuriancy in the most convincing manner, is, that flowers and apples are produced."

Another writer on the same subject says: "As the culture of potatoes, and particularly of the early sorts for the table, has of late become an object of very general attention, I hope the following account of a new method of obtaining these (without the help of hot beds) will be acceptable to the public.

"On the 2d of January, 1772, I made a hot-bed for the forward sort of potatoes, and on the 7th put in the sets, placing a glass and frame over them, and taking every precaution to defend them from the frost. Of these small potatoes or sets there remained about 40 in a basket, which was accidentally hung up in a warm kitchen, and there remained unnoticed till about the 25th of April. I then accidentally observed the basket, and perceiving something green on the edge of it, took it down, and to my great surprise, found that the potatoes had sprouted half a yard in length, and that there was a great number of very small potatoes formed on the fibrous roots which had grown out. I took them into my garden and planted them in a rich sandy soil without any manure. The roots I put into the ground three inches deep, and laid down the stems that had sprouted horizontally, and covered them with two inches of soil, but left the tops uncovered. Without further attention they grew surprisingly.

On the 26th of May I took up the roots planted in the hot bed on the 7th of January. They by no means answered my expectations, or paid for the trouble of their culture; but at the same time I was astonished to find the others which were put into the ground so late, to have produced larger potatoes than the roots in the hot bed. I took up all the roots and picked off the large potatoes from them, which amounted to from 4 to 12 on each root, and then set the roots again in the same ground. This indeed I have successfully practiced for many years, sometimes even twice, and have had a third good crop at Michaelmas. When this method is tried, the roots must be watered on the evening of hot days." Respectfully yours,

ABRM. REYNOLDS.

Ledyard, January 25, 1836.

Legislative Aid to Agriculture.

As this subject is now before the public, we re publish from our third volume the following Petition, drawn up by our fellow citizen, JESSE HAWLEY, Esq. and which was presented to the Legislature in 1833. Mr. Hawley's plan is worthy the public attention, and we cannot doubt but it will eventually be adopted by the Legislature, though our Farmers do not as yet seem to be prepared for any legislative action in their behalf; but we trust a brighter day is dawning, and that the time will soon come when they will be willing to unite in some plan, and we have seen none equal to the one here proposed, by which they may be directly benefited by Legislative enactments in their behalf. There can be no doubt but that the Legislature will, when pressed by the Farmers themselves, make such appropriations as may be necessary to secure the the desired object.

To the Editor of the Genesee Farmer:

DEAR SIR—By request, I have prepared the following draft of a Petition for circulation in the county of Monroe, and presentment to the next Legislature.

I have embodied in it the STANDARD POINTS I had suggested in my communication to the Genesee Farmer of 25th January last, and printed in the 4th No. of the second volume.

Having been informed that the suggestions I therein made, were very generally approved by the Members of the State Society, when met at Albany to organize in February last, I am induced *by that generous approbation*, to send you a copy of it for publication in the Farmer, that it may be approved, amended, and made better, for general concurrence, use and co-operation of the public, in making our application to the next Legislature

I have shown it for correction and revision to others, who were active members, and who had good practical experience under the operation of our former Institution, and in other counties of the state (mine being in this county only) and we have revised and made it to the best of our abilities.

If you think it worth the consideration I have presumed to give to it, please insert it,

And oblige yours, very respectfully,

JESSE HAWLEY.

Rochester, December 25, 1832.

Petition to the Legislature.

To the Honorable the Legislature of the State of New York in Senate and Assembly convened:

We the subscribers, being mostly Farmers residing in the county of Monroe,

HUMBLY REPRESENT:

That we should be highly gratified to see a STATE AGRICULTURAL INSTITUTION, forming an appendage of the magnificent system of Internal Improvement by which the State of New York has signalized herself among her sister states in the American Confederacy;—to be constituted by a main State Society, with County Societies, as branches to the same; to be endowed with an annual appropriation of twenty-five thousand dollars from the State Treasury;—to be distributed among the several County Societies on the ratio of one hundred and fifty dollars to each Member of the Assembly;—to be expended in premiums for practical and experimental improvements in Agriculture, Horticulture and Manufactures; and the residue (being nearly six thousand dollars) appropriated for the funds of the State Society, to be expended in procuring choice, select, rare and useful Animals, Vegetables, Seeds, Implements, and Essays on Agriculture, for public distribution.

That the citizens of each County in the State be authorized and required to form a County Agricultural and Horticultural Society, organized with officers and committees, similar to the former Institution;—that they draw their respective quotas of the public moneys, by the draft of their Presidents, certified and sealed by the County Clerk, on the Treasurer of the State Society;—that they add thereto, as far as may be, by private subscriptions and donations from patriotic citizens; but in order to obviate the senseless objections made to the former Societies, no competitor for premiums shall be required to pay initiation fees;—that the officers thereof shall distribute these moneys for premiums (after paying the necessary contingent expenses) on the best articles of Agricultural and Horticultural products; farm-stock; experiments in farming and gardening; routine of crops; premium farms; and all the varieties of domestic household and shop Manufactures;—that the Treasurer of the County Societies annually render an account of these applications of their moneys to the Treasurer of the State Society, and he, his accounts, to the Legislature, or the Comptroller;—that the surplus funds of any one year, be carried to extend the list of premiums for the succeeding year; that any county, failing to form and organize a Society, shall forfeit its quota of state bounty, and the amount thereof shall be carried, either to the disposable funds of the State Society;—or, to the next year's fund for distribution to the County Societies.

That the State Society be composed of Delegates from the County Societies, either by the President, ex-officio;—or by a proxy, to be elected, either at the annual meeting, or by the Board of Managers; and also of the Members of both Houses of the State Legislature, as the Members thereof;—that they annually convene at the Capitol in the City of Albany, on the first Tuesday of February, for the choice of their officers and the transaction of business;—and that any citizen of the State be eligible to its offices.

That the President, corresponding Secretary, Recording Secretary, and the Treasurer of the State Society, be allowed a moderate salary of $200 or $250, per annum, for their services; and that the like officers of the County Societies, together with the managing Committee, and the reviewing Committee for premium farms, be allowed from one to two dollars per day for actual services rendered in making preparations for, and in superintending the public exhibitions, and other business concerns of the Society;—in order to reward labor and talent—ensure the due and diligent performance of the duties of their respective offices, and to give life and spirit to the Institution.

That the funds may not be left to the doubtful contingencies of individual subscriptions;—or town votes;—supervisor's supplies;—but made a certain, adequate and permanent appropriation for a period of twenty years, that a thorough and efficient experiment may be made on the utility of Agricultural Societies, instead of the former incompetent and penurious trial of two years only.

We present you with this outline as being our views of the best manner of organizing and sustaining such an Institution: and we confidently ask it of you:

Because, Agriculture, being the chief source of human sustenance, deserves equal encouragement from the public authorities with any other vocation of man in society;—but has hitherto been the most neglected:—

Because, from past experience we are convinced that the award of premiums, and the competition for them is the best mode yet devised, both to stimulate and reward the exertions and enterprise of individuals in making practical experiments, to be collated into a body of science for general instruction:—

Because, from the like experience we find that no certain reliance can be reposed on voluntary subscriptions to obtain the funds for premiums:—

Because, the limited means and daily wants of our practical Farmers deny them the time and capital to make gratuitous experiments; and when so made by the few spirited and enterprising individuals, the result remains obscure, without general circulation for the public benefit:—

Because, the Farmers being the principal Tax-Payers of the State, deserve a portion of the public bounties for the encouragement and improvement of their vocation:—

Because, scientific and practical improvements in Agriculture are a common public benefit, as well as the Education of our children;—and like that, most assuredly deserves to be sustained with a systematic organization by statute laws and state bounty:—

And because, were it encouraged and sustained by public bounties, we believe it could be made greatly to increase subsistence; multiply population; and enhance the value of our Land.

We humbly conceive that such an Agricultural Institution belongs to the grandeur of New-York, to adorn our present Civil, Literary and Social Institutes and her system of Internal Improvements:—that while the experiment would cost the State Treasury half a million, yet nearly all, and probably more than that amount would be returned, by the increase of Canal Tolls, from increased production; the taxable value of the Real Property in the State augmented probably more than twenty millions; and the market value of the farming Lands in New York, made to command better prices than those in the adjoining States, as is already the fact, along the Northern boundary line of Pennsylvania. And that the project is a great stateman's measure. As in duty bound, et cetera.

DIRECTIONS

For sowing the seed and raising the plants of the White Italian Mulberry Tree.

1. To sow an ounce of seed, prepare a bed 50 feet long and 4 feet broad. Manure it *well* with a compost composed of one-third stable manure, one-third ashes, and one-third decomposed leaves from the woods, or garden mold; dig *deep*, pulverize finely, and then lay the beds off in drills 12 inches apart, ¼ or ½ of an inch deep; sow the seed as thick as your onions or parsneps; cover with rich mold, press the mold down gently, but sufficiently to cause the seed to come into contact with the earth; and should the weather be dry, water the seed bed every other evening, it will assist in promoting the germination of the seed and vigorous growth of the plant.

2. Keep the beds clean of weeds; and give an occasional watering with suds or soot and water, say once a week after they are up.

3. The second year, if not removed before, the plants must be removed into the nursery rows, which must be prepared as for any other crop. The ragged roots being taken off and the tap root shortened, the plants must be planted out 12 inches apart in rows three feet apart, the earth to be well trodden around the plant. As before, the earth must be kept open and free from weeds.

4. At two years old, the plants may be planted out into hedges, at 18 inches apart in rows six feet wide. The ground should be prepared as before directed, and some good rich mold put into the holes, to be pressed around the plant. If intended to be planted out as standard trees, 20 feet square apart would be a good distance; but in that case the plants should not be transplanted until they are about an inch in diameter. In either case they will require trimming and topping, and if kept as hedges should be treated as other hedges are.—*Balt. Far.*

Show of the Highland Agricultural Society at Ayr—Oct. 2, 1835.

Roots and Seeds.—The exhibition of Roots and Seeds was particularly enhanced in interest by the well arranged collection of Messrs. P. Lawson & Son, the indefatigable Seedsmen to the Society. Their collection consisted of 100 varieties of cereal grains; 50 of the leguminous; upwards of 200 of the plants cultivated for herbage, and 160 named varieties of the potatoe. From Auchincruive was exhibited Chevalier Barley weighing 57½ lbs. per bushel. A barley under the name of Pomeranian, which is a variety of the *Hordeum hexasticon*.—A fine sample of black oats imported from America by the late Earl of Cassillis in 1828, very productive of corn and straw, giving from 12 to 16 bolls per acre, and not liable to shake out with the wind. [A boll being six bushels, the yield per acre was from 72 to 96 bushels!] This is probably a variety of the *Avena orientalis.*

Messrs. J. Smith & Son, Seedsmen, Ayr, exhibited the seed and plant of a new species of *Heracleum* from Siberia, which for its large leaves and rapid growth, they considered suitable to the feeding of dairy cows.

Messrs. Lawson & Son exhibited the *Pinus austriaca*, [Austrian Pine,] a plant superior to the *Pinus sylvestris* [the Scotch Pine] or *P. laricio* [the Corsican Pine] in quickness of growth and durability of timber. Also plants of the *Pinus sylvestris* from Haganoe in Germany, presenting a more rapid growth than the plant produced from the native variety of this country. They had also twelve varieties of Flax raised from seed procured from Russia last year. That variety called [*Linum*] *usitatissimum-altissimum* appears to possess superior properties. *Vicia villosa* [a Vetch,] an ANNUAL, growing seven feet! in height, and the *V. biennis*, are worthy of experiment.—*Edin. Quar. Jour. Agri.*

☞ List of payments necesarily deferred till next week.

Improved Durham Short Horned Cattle.

Mr. POWEL'S entire stock of high bred Improved Durham Short Horns, imported or bred by him,

WILL be sold at auction, on Saturday 23d of April next, at 9 o'clock, at Powelton on the Schuylkill, opposite to Philadelphia.

Among them are—Ten Young Bulls and nine Heifers, principally derived from animals selected by Mr. Powel in England, in 1831. But one sale has been made for the last two years, the Cattle having been reserved for the present sale.

apr 2-f1t WM. HUGHS.

From the Cultivator.

Public and Private Economy,

By THEODORE SEDGWICK, *from the press of the Harpers, 12 mo. pp. 264—1836. Price 75 cts.*

This is a small and cheap volume that may be read with interest and profit by every class of American citizens, from the day laborer to the man of princely opulence, and which we respectfully beg leave to recommend to their consideration. It is adapted to the institutions and habits of our country; and if the principles which it inculcates are carried out in practice, it cannot but tend greatly to advance our happiness and to perpetuate our freedom.

The object of this volume is to make our people, what Cobbett long ago denominated them, "*a thinking people*"—to teach them that they are yet deficient in many of the comforts and enjoyments which constitute the true happiness of man, but which are accessible to all, or a great portion of our population, under the highly favored condition in which Providence has placed them; that wealth, obtained by honest labor, whether mental or bodily, both of which are legitimate sources of wealth, confers the power of multiplying our individual comforts, of acquiring knowledge, a source of high intellectual enjoyment, and of dispensing happiness to others; and that wealth *can* be acquired by all who practice industry and frugality—who are temperate in their habits, and discreet in their expenditures. That ill-gotton, disproportioned wealth, obtained by unfair dealing, by fraud, by oppression, by monopoly, generally contains the elements of its own destruction—and is most abused, by being employed for sensuality, pomp, parade, and splendid outside; and that *this* "no more fills the mind with happiness, than husks and ashes, if eaten, would give strength to the body." In short, its object is to make our people industrious, virtuous and wealthy—to show them the true use of wealth, in promoting substantial improvement, civilization, refinement, and the happiness of the human family—and that when it is abused, in its expenditure, it tends powerfully to defeat these noble purposes.

We intend, hereafter, so far to trespass upon the rights of the publisher, as to make some extracts from the work, for our Young Men's Department. In the mean time we make two quotations, as specimens of the author's style, and of the happy and perspicuous manner in which he illustrates and enforces his propositions.

"Public economy teaches, that all the wealth of the nation is divided into one great heap, which is the public wealth, and many smaller heaps, which is the private wealth. The public heap is that which belongs to the nation; as in the United States, the public lands, the public stores, the money, and every other kind of public property. This is for the support of the army, the navy, the officers of the government, and all the public institutions. The private heaps are those which belong to private individuals exclusively, as a man's farm, cattle, &c. Public economy teaches, that in the public stock all are partners, rich and poor, and that no man has a right to take a farthing without the public consent obtained. That all the wealth of a nation, public and private, may be supposed to be gathered into one great store-house, which is divided into public and private apartments; that the common stock is stored in the public rooms; that every industrious man has a private apartmant, under the same roof, which is under his own lock and key. That as the public apartments are filled from the private, the better supplied the latter, the better will be the stores of the nation. That if a man set fire to, or in any way destroy those parts of the buildiug where the public property is stored, he is a loser of course, because he is a partner in it, though the flames do not reach his own apartment; and if, through heedlessness, spite or malice, he kindles a blaze in one of the private apartments, he then destroys one of those heaps, out of which the great public store-house is furnished.

"From this we see, that in all true economy, property, belong to whom it may, to the nation or to individuals, to the rich or poor, is sacred, on account of the good it does—that it is very base and stupid for men to waste, burn or destroy any property, which is little better than a man's breaking the windows of his own house, or putting fire to a city where he is the owner of stores and houses. It is the character of a brute to waste and defile the food which he will need to-morrow. Property, then, is the life of the people, and it is suicide wantonly to destroy it."—p. 30.

"And what are intellectual pleasures? In presenting an answer to this question, we see the true value of property, and the leanness and meanness of poverty. Intellectual pleasure is found in the grace and beauty of life, in charity, in hospitality, in the luxury of spending our money so as to do the greatest good with it. It is in a good, comfortable, well furnished house, a well ordered farm, in the flower, the garden; in observing neatness and order prevail in our abodes, and in seeing our children neatly and fitly clad. It is, or would be every where, if men would buy it with the money which they can and do earn. So simple, and cheaply purchased is much of this kind of pleasure, that those who are not rich can have it as well as the opulent; and when the people come to care for, and to work in earnest mainly for these things, there will be an end of mobs and riots to avenge their wroags, real or supposed, by the destruction of property. They will then see how mean and stupid it is to waste that wealth which is the source of their greatest blessings, how like children to destroy the hen that lays the golden egg."—p. 102.

From the American Gardener's Magazine.

The To Kaylon Grape.

In your Magazine for December, I perceive some remarks on the To Kaylon grape, and a doubt is expressed whether it is synonymous with the Catawba. Permit me to place this question at rest, so far as my testimony will go. In the spring of 1834, I received by mail one or two grafts of this variety, taken from the parent vine, sent to me by a gentleman residing in the state of New York, who had published a flattering description of its merits, derived from those who had seen the fruit in perfection. I succeeded in raising one plant, which, during the past autumn, matured several fine clusters; and I have no hesitation in saying that the fruit is identical with the Catawba. I compared them in various stages, and could never discover the slightest difference, either in flavor or appearance. They are precisely alike in the oblate form of the berry, the color of the fruit, the period of the ripening, and in the peculiar disease which affects a portion of the berries when they are nearly grown. It has been said, and I find the same thing repeated by you, that Dr. Spafford raised the To Kalon from the seed, probably of a foreign variety. On examining, the most superficial botanist will readily perceive that the plant bears no affinity to the foreign species. It is, beyond doubt, a variety of *Vitis labrusca*, in which species so many valuable native varieties are found. If the To Kalon be a seedling, its parentage is purely American. We have already two grapes, namely, the Catawba and Muncey, (and this perhaps may make the third,) which, on the authority of Maj. Adlum, were discovered in different and remote parts of the country; and between them every point which constitute identity is complete.

Beaverdam, Va. 1st mo. 12, 1836. T. S. P.

1000,000 Silk Worm Eggs,

FOR SALE.

THE subscriber having promised to supply so many individuals who called to see his worms at work last year, and he having already sold so many, deems it proper to advise those who have not yet received any, and are intending to have some, that they must order them at once, or possibly they will be disappointed, the demand being so great, and this being the proper season to forward them. They are sold for 25 cents a thousand. Orders enclosing the amount will be punctually attended to.

JAMES HOUGHTON.

Rochester, Jan. 7, 1836. j7rf3m

WILLIAM ATKINSON, REAL ESTATE BROKER,

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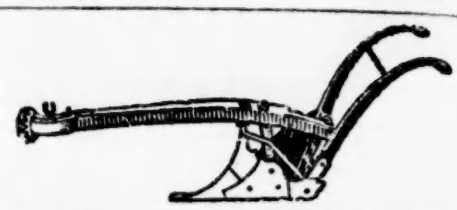
BUYS and sells Farms and City Property on commission, and attends to the collection of Mortgages.

☞ Several valuable Farms for sale.

February, 1836. feb 20f6m*



Rochester Plough Factory,

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THE subscriber is now finishing a large assortment of Ploughs of the most approved patterns, and warranted of first rate eastern castings and good timber.

Also—Cultivators and Road Scrapers, made of cast iron, and a first rate article. A general assortment of Shares, Land Sides, and other articles for repairing, constantly on hand, which he flatters himself will be an inducement to farmers to give him a call, instead of buying ploughs that are sent into the country from a distance, and no certainty of getting shares, &c. for repairing Repairing done at short notice. Cash paid for old cast iron.

P. D. WRIGHT.

Rochester, March 12, 1836. mar 18-f3trtf

Robbins' Planting Machine.

WITH this Machine Corn, Beans, Peas, Broom Corn, Mangel Wurtzel, Turneps, Onions, and seeds of almost every description, can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe. One man may easily plant five acres a day, placing the seeds any given distance apart, from two or more inches, and in rows two and a half feet apart.

Machines can be had by applying to REYNOLDS & BATEHAM, Rochester; C. N. BEMENT, Treasurer of the State Agricultural Society, Albany; BUSHROD BUCK, Lanesborough, Berkshire county, Mass.; and DANIEL T. BUCK, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville, Nov. 24, 1835. nov 28-6m

The Silk Culturist, & Farmer's MANUAL.

"THE object of this publication is to disseminate a thorough knowledge of the cultivation of the Mulberry Tree in all its varieties, the rearing of Silk Worms, the production of Cocoons, and the reeling of silk in the most approved method."

Itwill also contain interesting matter on Agricultural subjects generally.

Published monthly at Hartford, Conn., by the Hartford County Silk Society, at 50 cents per year, in advauce. Subscriptions received at the Rochester Seed Store, by

jnly 25 REYNOLDS & BATEHAM.

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THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe co.* N. Y. Sept. 13, 1835.